



HoustonBusiness

A Perspective on the Houston Economy

FEDERAL RESERVE BANK OF DALLAS • HOUSTON BRANCH • JULY 2005

Personal Income in the Texas Recession

The Texas recession appears starkly in personal income data recently released for 2001–03, offering another perspective on the pace, depth and geography of the downturn. The data show a recession driven mainly by decline in the Texas Triangle cities—the heart of the Texas economy.

Both the Texas and U.S. economies slipped into recession in March 2001, but the Texas recession was deeper and much longer. The nation saw a 1.5 percent decline in the U.S. coincident indicators of economic activity before recovery began in November 2001. In Texas, according to similar business-cycle indicators, the economy declined 2.8 percent before growth resumed in July 2003.

Oil, the technology bust and the 9/11 terrorist attacks of 2001 combined to prolong the recession in Texas, especially in the Texas Triangle cities of Austin, Dallas, Fort Worth, Houston and San Antonio. Table 1 compares the performance of these major metro areas with that of the United States and all of Texas. The high-tech cities of Austin and Dallas experienced the largest declines, according to these business-cycle indexes, falling 14.4 and 13.1

percent, respectively. Houston's economy, despite a sharp downturn and slow recovery in the oil sector, did not decline but remained stagnant, with no growth for more than two and a half years. San Antonio fell only 1.5 percent; it was the last into recession and the first out. Houston and Dallas were probably disproportionately hurt by the 9/11 attacks, as both cities are home to major airlines.

This article is a brief look at another data series that describes the Texas recession. Personal income is reported only annually and is delivered with a two-year lag for major metro areas, but it is still an important data series. There are no published data for metropolitan gross product, and personal income is the broadest measure of local economic activity available. Personal income made up 78.8 percent of Texas gross product in 2003, for example. Further, per capita personal income is a widely watched indicator of the local standard of living. Improvement in per capita income is generally seen as an improvement in local welfare; if city A has a per capita income higher than city

Table 1
Texas Recession Compared with United States: Business-Cycle Indexes

	Peak		Trough		Percent decline	Growth since trough
	Date	Index	Date	Index		
Austin	Nov. 2000	384.9	Aug. 2003	329.6	-14.4	5.6
Dallas	Dec. 2000	206.3	Jul. 2003	179.3	-13.1	3.0
Fort Worth	Dec. 2000	218.8	Jun. 2003	211.5	-3.3	3.4
Houston	Apr. 2001	206.8	Nov. 2003	207.6	—	4.7
San Antonio	Jun. 2001	212.7	Apr. 2003	209.5	-1.5	3.5
Texas	Mar. 2001	163.3	Jul. 2003	158.8	-2.8	3.5
United States	Mar. 2001	115.6	Nov. 2001	113.9	-1.5	4.7

Note: Growth since trough is measured from trough date to March 2005.

Sources: Texas state and metro data from www.dallasfed.org; U.S. data from the Conference Board.

B, it is often assumed that A is better off than B.

The Texas recession appears starkly in personal income data recently released for 2001–03, offering another perspective on the pace, depth and geography of the downturn. The data show a recession driven mainly by decline in the Texas Triangle cities—the heart of the Texas economy and home to 62.7 percent of the state’s population in 2003, 66.1 percent of employment and 71.1 percent of personal income.

Per Capita Income

Real per capita income in the United States, Texas and the Triangle cities is shown at the top of Table 2. The bottom of the table gives per capita income as a percentage of U.S. income. Texas’ per capita income in 2001 was 95 percent of U.S. income; the Texas Triangle cities had a combined income level well above the state and nation (109.8 percent), led by Houston (116.1 percent) and Dallas–Fort Worth (112.2 percent).

Economic theory predicts that regions poorer than the national average—like Texas—should make long-term gains in per capita income and converge toward the national norm. Except for the oil bust period of the 1980s, such gains are apparent in Table 2 for Texas from 1969 to 2001. The years selected for the table are peak

years in the business cycle except 2003, which was added to eliminate the effects of cyclical events. The period 2001–03 is different precisely because 2003 shows the effect of recession in Texas.

The largest declines in per capita income from 2001 to 2003 were in Austin (\$2,038), Houston (\$1,989) and Dallas–Fort Worth (\$1,570), while San Antonio fell only \$538. The decline in the Texas Triangle cities (an average of \$1,630) was almost twice that of the state (\$893). U.S. per capita income fell only \$120 in this period, resulting in a significant decline in the welfare of Texas and its cities relative to the United States. We see a decline of 2.6 percent in Texas per

capita income relative to the nation and 5 percent for the combined Triangle cities.

Sources of Income

Sources of personal income are divided into four major components (*Table 3*). Compensation is payments of wages, salaries and employer-paid benefits, plus the income of self-employed proprietors and partners. Property income is rent, interest and profits of employed capital. Transfers are unearned income such as pensions, income support payments, or Medicare and Medicaid payments. Transfers are measured net of employee and employer payments for social insurance. The “Other” category is a residence adjustment, moving personal income from place of work to place of residence if they differ.

As a share of personal income, compensation dominates nationally and by an even larger margin in Texas. In 2003, compensation was 77.7 percent of personal income in the United States, 82.6 percent in Texas and 87.9 percent in the Triangle cities. Property income and transfers both play a larger role in the United States than in

Table 2
Real Per Capita Income in Texas and United States, 1969–2003

	1969	1979	1989	2001	2003
Per capita income (dollars)					
Austin	12,627	17,576	21,512	31,547	29,509
Dallas–Fort Worth	16,155	21,471	25,565	33,595	32,025
Houston	15,082	23,041	24,482	34,761	32,772
San Antonio	12,433	16,184	19,841	26,489	25,951
Texas Triangle	14,922	21,020	24,002	32,882	31,252
Texas	13,308	18,787	21,192	28,448	27,555
United States	15,189	19,435	24,061	29,948	29,828
Percent of U.S. income					
Austin	83.1	90.4	89.4	105.3	98.9
Dallas–Fort Worth	106.4	110.5	106.3	112.2	107.4
Houston	99.3	118.6	101.7	116.1	109.9
San Antonio	81.9	83.3	82.5	88.5	87.0
Texas Triangle	98.2	108.2	99.8	109.8	104.8
Texas	87.6	96.7	88.1	95.0	92.4
United States	100.0	100.0	100.0	100.0	100.0

Note: Per capita income in constant 2000 dollars.

Sources: Bureau of Economic Analysis; authors’ calculations.

Table 3
Personal Income by Source, 2003 (Percent share)

	Per capita income	Compensation	Property	Transfers	Other
Austin	100	88.1	13.7	-0.4	-1.5
Dallas–Fort Worth	100	89.9	11.6	-0.1	-1.5
Houston	100	88.3	11.5	.9	-8
San Antonio	100	78.6	14.1	6.8	.5
Texas Triangle	100	87.9	12.0	1.0	-1.0
Texas	100	82.6	13.0	4.6	-2
United States	100	77.7	16.1	6.2	0

Note: Differences due to rounding error.

Sources: Bureau of Economic Analysis; authors' calculations.

Texas and a bigger role in Texas than in the Triangle cities.

Not surprisingly, property income fell during the recession, along with profits and interest rates. Property income's share of personal income declined 0.8 percentage points in Texas Triangle cities, 1.1 percentage points in Texas and 1.8 percentage points in the United States. At the same time, transfers rose as automatic stabilizers, such as unemployment insurance and welfare payments, kicked in. Transfers gained 1 percentage point in Triangle cities, 1.2 in Texas and 0.9 in the nation.

The major factor in explaining the decline in Texas per capita income is compensation. We can divide compensation per capita (C/P) into two parts: compensation per worker (C/E) and the number of employed workers in the population (E/P).

$$C/P = (C/E) (E/P)$$

Table 4 shows the percentage changes in these measures from 2001 to 2003. C/E is a measure of wage growth, and E/P is a measure of the job market's strength.

The declines in C/P were significantly greater in the Texas Triangle cities than in the state as a whole (-5.3 versus -3.2 percent), while the United States actually increased 0.6 percent from 2001 to 2003. Austin (-7 percent) and Houston (-6.5 percent) led the metropolitan declines.

Compensation per employ-

ee was relatively stable in Texas and the Texas Triangle, while it jumped 2.5 percent in the United States. Clearly, the declines in E/P dominated the fall in per capita compensation. The prolonged jobless recovery in the nation only pulled down the E/P ratio by 1.9 percent, while the comparable figure for Texas was 3.3 percent and for the Triangle cities, 4.8 percent.

Table 5 shows, however, that it was not just a weak job market that pulled down per capita compensation but a combination of weak job growth and rapid population growth. Texas population continued to grow at historic rates, much faster than the U.S. rate despite the two-plus years of recession. While Texas job growth was only 0.3 percent from 2001 to 2003, U.S. employment grew even more slowly, at 0.1 percent. At the same time, population growth in Texas was 3.6 percent, versus 2 percent in the United States. In the Texas Triangle, job growth was -0.4 percent and population growth 4.4 percent.

Conclusion

Recently released data on state and metropolitan personal income provide a new look at the Texas recession of 2001–03. The data provide the most comprehensive measure of the recession available at the metro level and our best

Table 4
Compensation Per Capita, 2001–03 (Percent change)

	C/P	C/E	E/P
Austin	-7.0	-1.8	-5.2
Dallas–Fort Worth	-4.7	1.4	-6.1
Houston	-6.5	-2.5	-4.0
San Antonio	-1.1	1.3	-2.4
Texas Triangle	-5.3	-0.4	-4.8
Texas	-3.2	0.1	-3.3
United States	0.6	2.5	-1.9

Note: C/P = compensation per capita,

C/E = compensation per employed worker,

E/P = employed workers in the population; differences due to rounding error.

Sources: Bureau of Economic Analysis; authors' calculations.

measure of how the welfare of Texas cities was affected by the decline.

The recession was strongly centered in the large cities of the Texas Triangle, probably driven by downturns in oil and high tech and the aftermath of 9/11. Austin and Houston suffered the largest declines in income per capita. Weak wage growth was a factor setting Texas apart from the United States, but a weak job market probably played the major role in pulling income down. The Texas job situation was made significantly worse by continued strong population growth across the state despite the ongoing recession.

—Robert W. Gilmer
Briana Wilsey

Gilmer is a vice president at the Federal Reserve Bank of Dallas. Wilsey will be a student at the University of Pennsylvania in the fall.

Table 5
Growth of Employment and Population, 2001–03 (Percent change)

	Employment	Population	E/P
Austin	-0.9	4.3	-5.2
Dallas–Fort Worth	-1.8	4.4	-6.1
Houston	0.6	4.7	-4.0
San Antonio	1.6	4.0	-2.4
Texas Triangle	-0.4	4.4	-4.8
Texas	0.3	3.6	-3.3
United States	0.1	2.0	-1.9

Note: Differences due to rounding error.

Sources: Bureau of Economic Analysis; authors' calculations.

A revised unemployment rate of 5.5 percent was finally announced for Houston, after a two-month delay to correct errors in local area statistics. The rate is comparable with the 5.3 percent for Texas. Combined with solid job growth, a Purchasing Managers Index over 60 and continued strength in home sales, economic statistics all point to continued strength in the local economy.

Retail and Auto Sales

Retailers were generally optimistic, as most were reporting they were ahead of plan and expecting good times to continue. Discounters continue to report solid sales, while department stores were a mixed bag of soft to gangbuster results. Furniture stores continue to report trouble moving big-ticket items. The coming sales tax holiday is seen as a potential extra boost to already solid results.

Auto dealers had another good month in May, putting 2005 sales for the first five months up 7.8 percent over the same period last year. The forced purchase of 75,000 new cars because of Tropical Storm Allison in 2002 may have cut into auto purchases that would have occurred in 2003 and 2004, making both those years abnormally weak. Recent strength may mark a return to a more normal pattern of auto sales.

Crude Oil and Natural Gas

Crude oil prices had fallen to \$46–\$47 per barrel in mid-May on the basis of slower economic growth and rising inventories. Since that time, they have steadily strengthened,

rising above \$60 per barrel by late June. Crude prices have been driven by a number of factors: stronger economic growth, very strong demand for both diesel fuel and gasoline that continues despite higher prices, fear of supply disruptions in the refinery system, concern about the outcome of the Iranian elections and an early start to the hurricane season—seen as a threat to refineries, producing platforms and transportation infrastructure.

Natural gas prices have risen along with crude prices, helped by warmer-than-normal temperatures in the South. Supplies are ample. Despite high temperatures, natural gas inventories remain 12 percent above normal for this time of year.

Refining and Oil Products

Refinery margins on the Gulf Coast remained very strong throughout June, about the same as May and more than \$3.50 per barrel higher than June 2004. Refinery capacity utilization on the Gulf Coast averaged rates near 98 percent, higher than the U.S. rate.

Distillate prices normally take a back seat to gasoline prices this time of year. However, extremely strong demand for diesel at home and in Europe raised concern about the refinery system's ability to build inventories for next winter. Distillate inventories did begin to rise in June, however, growing 8.6 percent between June 27 and July 1.

Chemicals

Chemical producers continued to struggle through a soft patch of weak demand for product, which has resulted in higher inventories and lower prices. Prices have declined for a variety of basic chemical and plastics products: ethylene, PET bottle resin, polystyrene, ethylene, polyethylene, polypropylene, ethylene glycol and benzene. A drop in Asian demand was blamed for the slowdown. In late June, there were signs that spot prices were generally stabilizing, and respondents in both the olefins and vinyl chains reported improvements in orders.

Oil Services and Machinery

The domestic rig count continued to rise, adding 40 rigs between late May and early July in the United States and eight rigs in Texas. Drilling in the Gulf of Mexico improved by 10 rigs but still remains depressed compared with the 2001 peak.

Oil service companies continue to report robust demand, limited capacity and strong pricing power. Demand for drilling services is high and continues to increase, with operators indicating growing plans for domestic and international drilling. Service companies are expressing more willingness to expand capacity, given current pricing, recent experience in turning down work and the potential durability of this drilling cycle.



For more information or copies of this publication, contact Bill Gilmer at (713) 483-3546 or bill.gilmer@dal.frb.org, or write Bill Gilmer, Houston Branch, Federal Reserve Bank of Dallas, P.O. Box 2578, Houston, TX 77252. This publication is also available on the Internet at www.dallased.org.

The views expressed are those of the authors and do not necessarily reflect the positions of the Federal Reserve Bank of Dallas or the Federal Reserve System.